

IN THE CLAIMS

Claims 5, 8, 9, 13, and 15 are amended.

Claims 44-62 are cancelled.

Claims 65-74 are newly added.

1. (Previously presented) A method for treating a patient, comprising:
selecting a patient having an indwelling intravascular catheter defining a lumen
therethrough and having an infection or a substantial risk of infection related to the presence of
the catheter; and

infusing a catheter lock solution into the lumen, the solution comprising a citrate salt
solution having a concentration effective to eliminate infection and to reduce the likelihood of
subsequent infection;

wherein the lock solution comprises a citrate salt in a concentration range, in weight
percent, of between about 10% and about 40%.

2-3 (cancelled)

4. (previously presented) The method of claim 1 wherein the lock solution
comprises a citrate salt in a concentration range, in weight percent, of between about 20% and
about 30%.

5. (currently amended) The method of claim 1 wherein the lock solution includes a viscosifying agent ~~selected from polyethylene glycol, glycerin, polygeline and mixtures thereof.~~

6. (previously presented) The method of claim 1 wherein the lock solution has a pH level between about 4.5 and about 6.5.

7. (previously presented) The method of claim 1 wherein the lumen of the catheter has an internal volume and said infusing includes infusing the lumen with an amount of the lock solution sufficient to fill between about 80% and about 100% of the internal volume of the lumen.

8. (currently amended) The method of claim 1 wherein the catheter has an internal volume and said infusing adding includes injecting the catheter with an amount of the lock solution greater than or equal to about 1.1 times the internal volume of the lumen.

9. (currently amended) A method of inhibiting infections in an animal having an indwelling catheter defining at least one lumen therethrough, said method comprising infusing into the lumen a pharmaceutically acceptable lock solution including a compound having anticoagulant and antibiotic activity, wherein said lock solution has a density ~~and a viscosity sufficient to maintain the lock solution in said lumen for a desired amount of time, wherein the desired amount of time is at least about 8 hours~~ of between about 1.0 g/ml and about 1.5 g/ml and a viscosity of between about 1.5 cP and about 4.0 cP.

10. (original) The method of claim 9 wherein the lock solution includes a citrate salt in a hypertonic concentration range, in weight percent, of between 1.5% and 50%.

11. (original) The method of claim 10 wherein the lock solution includes a citrate salt in a concentration range, in weight percent, of between 10% and 40%.

12. (original) The method of claim 11 wherein the lock solution includes a citrate salt in a concentration range, in weight percent, of between 20% and 30%.

13. (currently amended) The method of claim 9 wherein the lock solution includes a viscosifying agent ~~selected from polyethylene glycol, glycerin, polygeline or mixtures thereof~~.

14. (previously presented) The method of claim 9 wherein the lock solution has a density of between about 1.02 g/ml to about 1.04 g/ml and a viscosity of between about 1.5 cP and about 4.0 cP.

15. (currently amended) The method of claim 9 wherein the lock solution has a density of between about 1.02 g/ml and about 1.03 g/ml and a viscosity of between about 1.5 cP and about 2.0 cP.

16. (previously presented) The method of claim 9 wherein the lumen of the catheter has an internal volume and said infusing includes infusing the lumen with an amount of the lock

solution sufficient to fill between about 80% and about 100% of the internal volume of the lumen.

17. (previously presented) The method of claim 9 wherein the lumen of the catheter has an internal volume and said infusing includes infusing the lumen with an amount of the lock solution greater than or equal to about 1.1 times the internal volume of the lumen.

18. (previously presented) The method of claim 9 wherein the lock solution has a pH level between about 4.5 and about 6.5.

19. (original) A method of treating animals having a surgically implanted catheter, said method comprising infusing into said catheter a pharmaceutically acceptable lock solution comprising a bactericidal component, said bactericidal component including greater than about 50%, by weight based on the weight of the bactericidal component, of a citrate salt.

20. (original) The method of claim 19 wherein the bactericidal component includes greater than about 75%, by weight based on the weight of the bactericidal component, of a citrate salt.

21. (previously presented) The method of claim 19 wherein the bactericidal component includes greater than about 90%, by weight based on the weight of the bactericidal component, of a citrate salt.

22. (previously presented) The method of claim 19 wherein the lock solution includes a viscosifying agent.

23. (previously presented) The method of claim 19 wherein the pharmaceutically acceptable lock solution has a pH between about 4.5 and about 6.5.

24. (previously presented) The method of claim 19 wherein the lumen of the catheter has an internal volume and said infusing includes infusing the lumen with an amount of the lock solution sufficient to fill between about 80% and about 100% of the internal volume of the lumen.

25. (previously presented) The method of claim 19 wherein the lumen of the catheter has an internal volume and said infusing includes infusing the lumen with an amount of the lock solution greater than or equal to about 1.1 times the internal volume of the lumen.

26-62 (cancelled)

63. (previously presented) The method of claim 9 wherein the animal is a human.

64. (previously presented) The method of claim 19 wherein the animal is a human.

65. (new) The method of claim 19 wherein the bactericidal component consists essentially of sodium citrate dissolved in the solution.

66. (new) The method of claim 19 wherein said catheter lock solution is essentially free from any therapeutically effective concentration of any other bactericidal compound other than sodium citrate.

67. (new) A method for treating a patient, comprising:
selecting a patient having an indwelling intravascular catheter defining a lumen therethrough, and needing a bactericidal catheter lock solution; and
infusing a catheter lock solution into the lumen, the solution comprising a bactericidal component;

wherein the bactericidal component consists essentially of sodium citrate dissolved in the solution.

68. (new) A method for treating a patient, comprising:
selecting a patient that has an indwelling intravascular catheter defining a lumen therethrough and that has a need for infusion of a bactericidal catheter lock solution into the lumen of the catheter; and
responding to the need by infusing into the lumen a catheter lock solution comprising a citrate salt solution having a concentration effective to eliminate infection and to reduce the likelihood of subsequent infection.

69. (new) The method of claim 68 wherein the catheter lock solution comprises a bactericidal component, and wherein the bactericidal component consists essentially of sodium citrate dissolved in the solution.

70 (new) The method of claim 68 wherein the lock solution has a density of between about 1.0 g/ml and about 1.5 g/ml and a viscosity of between about 1.5 cP and about 4.0 cP.

71. (new) The method of claim 68 wherein the lock solution has a density of between about 1.02 g/ml and about 1.04 g/ml and a viscosity of between about 1.5 cP and about 4.0 cP.

72. (new) The method of claim 68 wherein the lock solution includes a citrate salt having a concentration, in weight percent, of from about 1.5% to about 50%.

73. (new) The method of claim 5 wherein the viscosifying agent is selected from polyethylene glycol, glycerin, polygeline and mixtures thereof.

74. (new) The method of claim 13 wherein the viscosifying agent is selected from polyethylene glycol, glycerin, polygeline and mixtures thereof.